



# BOLD. for SMS

## *API Specifications*

August 2024 | Version 4.1

**For technical-related matters, please  
contact us at the number below:**

Telephone: +603 2163 2100 (24hours)

Email: [techsupport@macrokiosk.com](mailto:techsupport@macrokiosk.com)

Website: [www.macrokiosk.com](http://www.macrokiosk.com)

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## Summary of Changes

Version	Date	Areas of Amendments	Summary of Changes
3.14	14/10/13	Section 9.0	<ul style="list-style-type: none"> <li>FAQ on WAP being supported in Bulk SMS removed.</li> </ul>
3.15	17/07/14	All Sections	<ul style="list-style-type: none"> <li>Document format has been revised.</li> <li>REST &amp; SOAP protocols included, wherever necessary.</li> </ul>
3.16	14/12/15	All sections	<ul style="list-style-type: none"> <li>4 param removed. Only -1 param retained.</li> </ul>
3.17	11/1/16	All Sections	<ul style="list-style-type: none"> <li>Endpoint changed:  <a href="http://www.etracker.cc/bulksms/mesapi.aspx?">http://www.etracker.cc/bulksms/mesapi.aspx?</a> </li> </ul>
		Sec 4.1.2	<ul style="list-style-type: none"> <li>Expected result changed to -1.</li> </ul>
		Sec 4.6 & 4.8	<ul style="list-style-type: none"> <li>New XML response added.</li> <li>New notes added.</li> </ul>
		Sec 5.0	<ul style="list-style-type: none"> <li>URL changed.</li> </ul>
		Section 6.0	<ul style="list-style-type: none"> <li>Response code 407 &amp; 410 removed</li> <li>413 changed to 'Invalid Broadcast Time'</li> <li>New Response Codes from 414 to 426 added.</li> </ul>
3.18	26/05/16	Sec 6.0 & 8.2	<ul style="list-style-type: none"> <li>MES GUI changed to CONSOLE</li> </ul>
		Section 5.0 & Sec 6.0	<ul style="list-style-type: none"> <li>URL changed to <a href="https://console.etracker.cc">https://console.etracker.cc</a></li> <li>Response code 426 removed.</li> </ul>
3.19	20/07/16	Sec 6.0	<ul style="list-style-type: none"> <li>411 changed to 'Blacklisted'.</li> </ul>
3.20	15/11/16	Sec 4.3, 4.4 & 4.5	<ul style="list-style-type: none"> <li>Added new parameter 'Title'</li> </ul>
		Sec 6.0	<ul style="list-style-type: none"> <li>New error code 427</li> </ul>
3.21	13/12/16	Sec 4.6, 4.7 & 4.8	<ul style="list-style-type: none"> <li>Updated sample code</li> </ul>
3.22	19/12/16	Sec 4.4, Sec 4.5	<ul style="list-style-type: none"> <li>Minor editorial revision</li> </ul>

3.23	26/1/17	Sec 4.4	<ul style="list-style-type: none"> <li>Corrected URL example</li> </ul>
3.24	21/2/17	Section 4.9, Section 4.10	<ul style="list-style-type: none"> <li>Added feature Low Balance Alert</li> <li>Added Low Balance Alert Status (for Prepaid Single User only)</li> </ul>
3.25	23/5/17	Section 4.4, Section 4.5, Section 4.9, Section 4.10	<ul style="list-style-type: none"> <li>Added new parameter 'Detail'</li> <li>Added new Successful Response</li> <li>Added Prepaid Single &amp; Multi User account for Low Balance Alert</li> <li>Added new Low Balance Alert Status</li> </ul>
3.26	30/6/17	Section 6.0	<ul style="list-style-type: none"> <li>Updated System Response Codes</li> </ul>
3.27	20/1/2021	Section 5.0 Section 6.0	<ul style="list-style-type: none"> <li>Added new parameter statusdetails</li> <li>Added new response code 407</li> </ul>
3.28	6/9/2021	Section 4.3, Section 5.0, Section 6.0	<ul style="list-style-type: none"> <li>Added new additional parameter</li> </ul>
3.29	23/6/2022	Section 6.0	<ul style="list-style-type: none"> <li>Segregated the error response by account type</li> </ul>
3.30	13/9/2023	Section 4.0	<ul style="list-style-type: none"> <li>Segregated specification by MT, MO &amp; DN</li> <li>Added new authentication method – JWT</li> </ul>
4.00	31/10/2023	Section 5	<ul style="list-style-type: none"> <li>Error code 407: Unicode Limit has been extended to 1,000 characters</li> </ul>
4.1	26/8/2024	Section 4.1.2.1 Section 4.1.2.2 Section 4.1.2.3 Section 5.0	<ul style="list-style-type: none"> <li>Added information about auto detection of message content to match the encoding format (ASCII/ Unicode)</li> <li>Added new HTTP error code range from 432 to 435.</li> </ul>

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## **1.0 Introduction**

This Bulk SMS API document is specifically designed for client's developers and implementers with basic programming knowledge to make HTTP / HTTPS connections with REST method between Bulk SMS gateway and the client's application.

This document will highlight the process of sending and receiving messages by simply submitting either a POST or a GET request to bulk SMS gateway.

However, the POST method is recommended as opposed to the GET method due to the limitation of size and exposure of the HTTP / HTTPS URL bar when a request submission is made.

Bulk SMS gateway can deliver messages to mobile operators' subscribers regardless of prepaid or postpaid.

### **1.1 Overview**

Bulk SMS API enables content providers to send large amounts of SMS to mobile subscribers. It is a gateway that allows content providers to advertise their products and services. Content providers are charged for these SMS, as they send out marketing blasts such as discount/promotion offers, whilst mobile subscribers receive these contents free of charge.




## 2.0 Guide to Use this API document

In short these are few details that you need to pay attention to:

- (i) Understand the following terms and concepts because it will help you move quickly through the document.

Terms	Definition						
-1 response	This refers to an Asynchronous response whereby you as the client acknowledge that you have received the MO and have agreed to provide the MT at a later time.						
API	Application Programming Interface The interface that a computer system, library or application provides in order to allow requests for services to be made out of it by other computer programs, and/or to allow data to be exchanged between them.						
Asynchronous	Refers to a delayed MT return from the clients to the mobile subscriber. Also known as '-1' parameter.						
Blacklisted Numbers	Mobile numbers which have been requested to be removed from receiving certain categories of promotional messages.						
Client	Content Provider (CP)						
Endpoint	An endpoint is a web service, defined by a WSDL file. It defines the address or connection point to a web service. It is typically represented by a simple HTTP URL string.						
Encode	<p>This means that the MT content and/or URL is coded into computer language to deliver the message to the client's application and vice versa. Example:</p> <table border="1"> <thead> <tr> <th>Before Encoding</th><th>After Encoding</th></tr> </thead> <tbody> <tr> <td>Hello World</td><td>Hello%20World</td></tr> <tr> <td>http://www.yourdomain.com/receive.asp?from=631234567890&amp;text=hello world&amp;time=yyyy-mm-ddhh-mm-ss&amp;moid=1234567&amp;shortcode=2929&amp;telcoid=1</td><td>http%3A%2F%2Fwww.yourdomain.com%2Freceive.asp%3Ffrom%3D631234567890%26text%3Dhello%20world%26time%3Dyyyy-mm-ddhh-mm-ss%26moid%3D1234567%26shortcode%3D2929%26telcoid%3D1</td></tr> </tbody> </table> <p>You can encode the content and URL by using the Macroiosk converter stated here:</p>	Before Encoding	After Encoding	Hello World	Hello%20World	http://www.yourdomain.com/receive.asp?from=631234567890&text=hello world&time=yyyy-mm-ddhh-mm-ss&moid=1234567&shortcode=2929&telcoid=1	http%3A%2F%2Fwww.yourdomain.com%2Freceive.asp%3Ffrom%3D631234567890%26text%3Dhello%20world%26time%3Dyyyy-mm-ddhh-mm-ss%26moid%3D1234567%26shortcode%3D2929%26telcoid%3D1
Before Encoding	After Encoding						
Hello World	Hello%20World						
http://www.yourdomain.com/receive.asp?from=631234567890&text=hello world&time=yyyy-mm-ddhh-mm-ss&moid=1234567&shortcode=2929&telcoid=1	http%3A%2F%2Fwww.yourdomain.com%2Freceive.asp%3Ffrom%3D631234567890%26text%3Dhello%20world%26time%3Dyyyy-mm-ddhh-mm-ss%26moid%3D1234567%26shortcode%3D2929%26telcoid%3D1						

	<a href="http://utilities.etracker.cc/converter/converter.aspx">http://utilities.etracker.cc/converter/converter.aspx</a>
HTTPS	<p>Hypertext Transfer Protocol Secure</p> <p>HTTPS encrypts and decrypts user page requests as well as the pages that are returned by the Web server. The use of HTTPS protects against eavesdropping and man-in-the-middle attacks.</p>
Known Issues	Issues that are beyond MACROKIOSKs control but highlighted to clients for their knowledge.
Marketing Applies	It means the same thing as 'Promotional Messages'. Kindly refer to 'Promotional Messages'.
Promotional Messages	Refers to messages containing promotional material or advertisement of a product/service.
Synchronous	Refers to an immediate MT return from the clients to the mobile subscriber. Also known as '4-parameter'.
System Limitation	Refers to MACROKIOSK's system limitation which may be further enhanced in the future depending on client's requirement.
TPS	Transaction per second is a computer software and hardware measurement that represents the number of transactions completed in one second.
Transactional Messages	<p>"Transactional message" means an SMS containing only:</p> <ul style="list-style-type: none"> <li>• Information sent to its customer(s) by the Bank or financial institution or insurance company or credit card company or Access Provider pertaining to the account of that customer(s);</li> <li>• Information given by transport operators or its authorized agencies to its passengers regarding travel schedules, ticket booking and reservation;</li> <li>• Information from a registered educational institution to parents or guardians of its students;</li> <li>• Any other message as may be specified by the Authority, from time to time.</li> </ul>
WEBF	<p>Web Failed</p> <p>Refers to a failed attempt to pass the MO (Mobile Originating) parameters to the client's URL.</p>

- (i) Pay attention to the  'Remember' icon posted throughout the document. This is highlighted for you to take note when doing system integration.
- (ii) The 'Tool' icon  in most section gives you the endpoints and methods required to send the parameters across to MACROKIOSK and versa.
- (iii) Selected texts throughout this document are hyperlinked.  
*e.g. Refer to [Known Issue](#)*  
You can click on the hyperlinks to get more information on the selected text.
- (iv) Notes are highlighted in  are for easy notice.
- (v) Please note that the commercial information of the product such as the product feature, process flow etc. can be found in the *References for Bulk SMS API*.





### 3.0 Important Notes For Clients

1. Please apply for the Bulk SMS User Accounts to receive MO and send MT.
2. Delivery Notifications (DN) will be updated periodically for all content providers subject to the frequency set by the respective mobile operators.
3. The SMSC (Short Messaging Service Centre) will retry the sending of a message to the mobile subscriber within the stipulated retry policy set by each respective mobile operator's SMSC.
4. Failure to deliver will result in the message being deleted from the SMSC.
5. Clients are responsible for the following:
  - Content format compatibility with the mobile handset.
  - Ensure correct encoding format is used according to message content type before sending it over to Bulk SMS API gateway.

## 4.0 Specification

### 4.1 MT

#### 4.1.1 Authentication Methods

There are two authentication methods to consume the BSMS API:

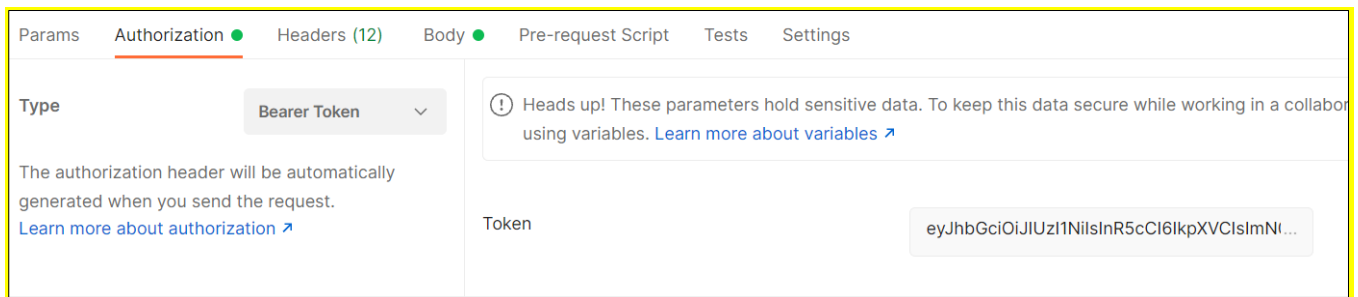
1. [clear text credential](#)
2. [JSON Web Token \(JWT\)- through Web API consumption method only.](#)

##### 4.1.1.1 Clear Text Credential

To authenticate the MT request, user merely needs to pass in the credential as “user” and “pass” in clear text form along with the MT request API string.

##### 4.1.1.2 JSON Web Token (JWT) Authentication

User may also opt in for JWT authentication should the user requires a more secured way of sending the MT. JWT authentication requires user to request access token via [Token API](#) and pass in as 'Bearer Token' upon sending the MT message.



Once JWT authentication is subscribed, user can no longer authenticate the MT request with clear text credential.

#### 4.1.1.2.1 Token API

URL: <https://www.etracker.cc/bulksms/Authenticate>

## JWT Web Token

Encoded

PASTE A TOKEN HERE

eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJTZXJ2YWwNlSUQiLCJpc3MiOiJlc2VybWtZSIImF1ZCI6ImFQSSJ9.CwvxWLXWEcLO4mKvkZl1H-wX8icmxEZfVj60gA-8tm4

Decoded

EDIT THE PAYLOAD AND SECRET

HEADER: ALGORITHM & TOKEN TYPE

{  
  "aalg": "HS256"  
}

PAYLOAD: DATA

{  
  "sub": "ServiceID",  
  "iss": "username",  
  "aud": "API"  
}

VERIFY SIGNATURE

HMACSHA256(  
  base64UrlEncode(header) + "." +  
  base64UrlEncode(payload),  
  api-key  
) ☐ secret base64 encoded

User submits the JWT Web Token as Bearer Token to authorize itself and request for the access token.

**Sample Bearer Token:**

[eyJhbGciOiJIUzI1NiJ9.eyJzdWl0eTZXJ2YWNNISUQiLCJpc3MiOiJ1c2VybmFtZSIsImF1dCI6ImF1dCkqFSJSJ9.CwvxWIXwEcLO4mKvKZI1H-wX8icmxEZfVj60gA-8tm4](#)

Header:

```
{
  "alg": "HS256"
}
```

### Payload:

```
{
  "sub": "serviceID",
  "iss": "username",
  "aud": "API"
}
```

**Signature:**

```
HMACSHA256(
    base64UrlEncode(header) + "." +
    base64UrlEncode(payload),
    API key
)
```

### Successful Token Request

Access token and expired date will be returned upon successful token request.

```
1  {
2    "token": "eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOiIxNjkwMjc5NzU1IiwiaXhwIjozNjkwODg0NTU1LCJpc3MiOiJmVWYwIiwiaWF0IjoiB9aP9m19uUn8Xo1geiIEqT4f0ND1bNuv3bFlKH2GmW0",
3    "expired_after": "2023-08-01 18:09:15+08:00"
4  }
```

### Failed Token Request

Unsuccessful Token API response return the error message along with HTTP status code.

```
1  <Error>
2    <Message>Unauthorized</Message>
3  </Error>
```

Kindly refer to [4.1.1.2.2 Token API Response](#)

#### 4.1.1.2.2 Token API Response

The following HTTP status codes would be returned:

HTTP Status Code	Description
200	Successful API request
401	Unauthorized request (missing or wrong authentication information)
503	Temporary service outage

## 4.1.2 API Consumption Methods

### 4.1.2.1 Classic ASP

API Endpoint	Method
<a href="https://www.etracker.cc/BulkSMS/mesapi.aspx">https://www.etracker.cc/BulkSMS/mesapi.aspx</a>	GET/ POST

#### Standard Parameters

No	Parameter	Type	Description	Example
1	User	Character	Username of the client's account <ul style="list-style-type: none"> <li>Username will be provided once the account is activated.</li> </ul>	Company123
2	Pass	Character	Password for authentication.	abc4567
3	*Type <i>Optional parameter</i>	Numeric	Character type for text: 0 – ASCII 5 - Unicode  <b>Notes:</b>  1. <i>Character data type (ASCII/Unicode) will be autonomously detected based on the message content if “Type” parameter is not assigned with any value.</i>  2. <i>Auto-correction for the message content “Type” will automatically take place if ever the encoding of the message content does not match with the “Type” value assigned.</i>	0
4	To	Numeric	Recipient's mobile number <ul style="list-style-type: none"> <li>The recipient's mobile number must have the country code (without the “+” sign).</li> </ul>	60121234567
5	From	Character	Sender's name, Sender's ID or Sender's mobile number. <b>Format: alphanumeric &amp;/ numeric character</b> <ul style="list-style-type: none"> <li>Numeric CLI (Caller Line Identification): Up to 14 characters. The ‘+’ to be excluded.</li> <li>Alphanumeric CLI (Caller Line Identification): Up to 11 characters.</li> </ul>	Abcenterprise Or Shania Or 60123388990 *Format is Telco dependent

6	Text	Character	<p>Message Content</p> <p><b>If “Type” parameter is assigned</b></p> <ul style="list-style-type: none"> <li>• ASCII: The content must be URL encoded.</li> <li>• Unicode: The content must be formatted in HEX format.</li> </ul> <p><b>If “Type” parameter is not assigned</b></p> <p>Content must be URL encoded, be it ASCII or Unicode.</p> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1. Message content will be converted into Unicode content if ever any Unicode character (<b>except punctuation marks</b>) is detected.</li> <li>2. Punctuation marks in Unicode format will be converted to punctuation marks in ASCII format once detected in the message content identified as ASCII message.</li> </ol>	<p><b><u>URL encoding</u></b></p> <p><b>Roman</b></p> <p>Welcome%20to%20abcenterprise</p> <p><b>Unicode</b></p> <p>%e5%8d%8e%e8%af%ad%e6%b5%8b%e8%af%95</p> <p><b><u>HEX</u></b></p> <p>4e00</p>
7	ServID	Character	Service ID	MES01
8	*Title <i>Optional parameter</i>	Character	<p>Broadcast Title</p> <ul style="list-style-type: none"> <li>• Alphanumeric only, max 50 characters</li> </ul>	Sports555
9	*Detail <i>Optional parameter</i>	Boolean	<p>To show additional information of:</p> <ul style="list-style-type: none"> <li>• Account balance</li> <li>• Total MSISDN in one API request</li> <li>• Charge for each MSISDN</li> <li>• Currency for each charge</li> </ul> <p>Parameter Value:</p> <p>1 – Show</p> <p>0 – Hide (default)</p>	1

10	<i>*Any Optional parameter</i>	Character / Numeric	<p>Client may request for personalized parameter(s) to be processed upon submitting MT request.</p> <p>Up to 5 configurable parameters could be requested by client and to be configured by Macro Kiosk.</p> <p>The parameter(s) to be recognized is upon request to the Global Business Consultants.</p> <p>Not supported via SOAP web service.</p>	TEST123456 / 567890
----	--	------------------------	--	------------------------

## Example (GET)

### **With “Type” parameter**

#### **ASCII**

<https://www.etracker.cc/bulksms/mesapi.aspx?user=company123&pass=abc4567&type=0&to=60121234567&from=Hello&text=Hello+World!&servid=MES01&title=SampleTitle>

#### **Unicode**

<https://www.etracker.cc/bulksms/mesapi.aspx?user=company123&pass=abc4567&type=5&to=60121234567&from=Hello&text=534E8BED6D4B8BD5&servid=MES01&title=SampleTitle>

### **Without “Type” parameter**

#### **ASCII**

<https://www.etracker.cc/bulksms/mesapi.aspx?user=company123&pass=abc4567&to=60121234567&from=Hello&text=Hello+World!&servid=MES01&title=SampleTitle>

#### **Unicode**

<https://www.etracker.cc/bulksms/mesapi.aspx?user=company123&pass=abc4567&to=60121234567&from=Hello&text=%e5%8d%8e%e8%af%ad%e6%b5%8b%e8%af%95&servid=MES01&title=SampleTitle>

## Example (POST)

URL - <https://www.etracker.cc/bulksms/mesapi.aspx>

#### **ASCII**

HTTP Body -

user=company123&pass=abc4567&to=60121234567&from=Hello&text=Hello+World!&servid=MES01&title=SampleTitle

#### **Unicode**

HTTP Body -

user=company123&pass=abc4567&type=5&to=60121234567&from=Hello&text=534E8BED6D4B8BD5&servid=MES01&title=SampleTitle

### **With “Detail” parameter:**

<https://www.etracker.cc/bulksms/mesapi.aspx?user=company123&pass=abc4567&type=5&to=60121234567&from=Abcenterprise&text=4e00&servid=MES01&title=SampleTitle&detail=1>



## Response

Successful response	Successful response with “Detail” parameter
<i>{MSISDN},{MsgID},{Status}</i>	<i>{MSISDN},{MsgID},{Status},{Currency},{Price} ={Balance}, {Total MSISDN}</i>

### Sample of response with the following assumption:

- Prepaid Account Balance (before request) is MYR 100.00 (Malaysia Ringgit)
- Price for each SMS cost MYR 0.05
- For Postpaid account, account balance will be always show zero.

Number of MSISDN in one API request	Successful MT response
One MSISDN	60121234567,118888001,200,MYR,0.05 =99.9500,1
Three MSISDN	60121234567,118888001,200,MYR,0.05 60131234008,118888002,200,MYR,0.05 60141234009,118888003,200,MYR,0.05 =99.8500,3

### Example: (Concatenated SMS)

<https://www.etracker.cc/bulksms/mesapi.aspx?user=user&pass=password&type=0&to=60121234567&from=macrokiosk&text=this+is+a+test+SMS+message+to+send+SMS+content+greater+than+160+characters+in+a+single+URL+call+the+concatenated+SMS+should+be+displayed+on+the+mobile+phone+as+one+whole+SMS&servid=MES01>

\* Please refer to [Known Issues](#) for Telcos not supporting the concatenated format.

#### Note:

1. The bulk SMS API will return 3 values as specified in the [DN](#).

The 3 parameters are:

- msgID - The id returned to the application when MT is sent.
- msisdn - The mobile number of the recipient when MT is sent.
- status – The MT acknowledgement from our gateway.

2. In accordance with Malaysian Telco guidelines, when sending to the Malaysia prefix (+60), the system will auto append “RM0” at the beginning of SMS. This will consume a total of 4 characters (i.e., RM0<space>) from the total characters count of the message.

3. Credits will be deducted accordingly if the total characters count amounts to more than 1 SMS after auto appending.

4. For more information, please refer to the latest Bulk SMS Product Paper.

#### 4.1.2.2 Web API

API Endpoint	Method
<a href="https://www.etracker.cc/BulkSMS/Send">https://www.etracker.cc/BulkSMS/Send</a>	GET/ POST

#### Standard Parameters

No	Parameter	Type	Description	Example
1	User	Character	Username of the client's account <ul style="list-style-type: none"> <li>Username will be provided once the account is activated.</li> </ul>	Company123
2	Pass	Character	Password for authentication.	abc4567
3	*Type <i>Optional parameter</i>	Numeric	Character type for text: 0 – ASCII 5 – Unicode <b>Notes:</b> <ol style="list-style-type: none"> <li>Character data type (ASCII/Unicode) will be autonomously detected based on the message content if "Type" parameter is not assigned with any value.</li> <li>Auto-correction for the message content "Type" will automatically take place if ever the encoding of the message content does not match with the "Type" value assigned.</li> </ol>	0
4	To	Numeric	Recipient's mobile number <ul style="list-style-type: none"> <li>The recipient's mobile number must have the country code (without the "+" sign).</li> </ul>	60121234567
5	From	Character	Sender's name, Sender's ID or Sender's mobile number. <b>Format: alphanumeric &amp;/ numeric character</b> <ul style="list-style-type: none"> <li>Numeric CLI (Caller Line Identification): Up to 14 characters. The '+' to be excluded.</li> <li>Alphanumeric CLI (Caller Line Identification): Up to 11 characters.</li> </ul>	Abcenterprise Or Shania Or 60123388990 *Format is Telco dependent

6	Text	Character	<p>Message Content</p> <p><b>If “Type” parameter is assigned</b></p> <ul style="list-style-type: none"> <li>• ASCII: The content must be URL encoded.</li> <li>• Unicode: The content must be formatted in HEX format.</li> </ul> <p><b>If “Type” parameter is not assigned</b></p> <p>Content must be URL encoded, be it ASCII or Unicode.</p> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1. Message content will be converted into Unicode content if ever any Unicode character (<b>except punctuation marks</b>) is detected.</li> <li>2. Punctuation marks in Unicode format will be converted to punctuation marks in ASCII format once detected in the message content identified as ASCII message.</li> </ol>	<p><b><u>URL encoding</u></b></p> <p><b>Roman</b></p> <p>Welcome%20to%20abcenterprise</p> <p><b>Unicode</b></p> <p>%e5%8d%8e%e8%af%ad%e6%b5%8b%e8%af%95</p> <p><b><u>HEX</u></b></p> <p>4e00</p>
7	ServID	Character	Service ID	MES01
8	*Title <i>Optional parameter</i>	Character	<p>Broadcast Title</p> <ul style="list-style-type: none"> <li>• Alphanumeric only, max 50 characters</li> </ul>	Sports555
9	*Any <i>Optional parameter</i>	Character / Numeric	<p>Client may request for personalized parameter(s) to be processed upon submitting MT request.</p> <p>Up to 5 configurable parameters could be requested by client and to be configured by Macro Kiosk.</p> <p>The parameter(s) to be recognized is upon request to the Global Business Consultants.</p> <p>Not supported via SOAP web service.</p>	TEST123456 / 567890

## Response

The response of the MT request differs by the HTTP Accept header value being set.

HTTP Accept header	Response	
	Successful MT request	Failed MT request
application/json	{ "MsgID": "1128260043", "Msisdn": "60123456789", "Status": "200" }	{ "MsgID": "", "Msisdn": "", "Status": "400" }
application/xml	<Result  xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <MsgID>1128260043</MsgID> <Msisdn>60123456789</Msisdn> <Status>200</Status> </Result>	<Result          xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"> <MsgID /> <Msisdn/> <Status>400</Status> </Result>
Null (Trigger from browser without specifying the Accept header)	*XML format will be returned if no Accept header value is specified Refer to xml successful MT request, as above.	*XML format will be returned if no Accept header value is specified Refer to XML Failed MT request, as above.

Other format (eg: application/x-www-form-urlencoded)	*XML format will be returned if Accept header value other than XML or JSON is specified Refer to xml successful MT request, as above.	*XML format will be returned if Accept header value other than XML or JSON is specified Refer to XML Failed MT request, as above.
--	--	--

**Note:**

1. HTTP 'Content-Type' header must be configured with either value "**application/json**" or "**application/xml**", or else MT request would fail with the following error message in XML / JSON format, depending on the HTTP 'Accept' header set. If no value has been configured for the 'Accept' header, error message will be returned in XML format by default.

**XML:**

```
<Result xmlns:xsd=http://www.w3.org/2001/XMLSchema
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <MsgID />
  <Msisdn />
  <Status>Invalid HTTP content media type</Status>
</Result>
```

**JSON:**

```
{
  "MsgID": "",
  "Msisdn": "",
  "Status": "Invalid HTTP content media type"
}
```

2. MT request data (HTTP body content) must be serialized in proper format before submission.

### 4.1.2.3 SOAP API

API Endpoint	Method
<a href="https://www.etracker.cc/BulkSMS/SoapService.svc">https://www.etracker.cc/BulkSMS/SoapService.svc</a>	GET

### Standard Parameters

No	Parameter	Type	Description	Example
1	User	Character	Username of the client's account <ul style="list-style-type: none"> <li>Username will be provided once the account is activated</li> </ul>	Company123
2	Pass	Character	Password for authentication.	abc4567
3	*Type <i>Optional parameter</i>	Numeric	Character type for text: 0 – ASCII 5 – Unicode <b>Notes:</b> <ol style="list-style-type: none"> <li>Character data type (ASCII/Unicode) will be autonomously detected based on the message content if "Type" parameter is not assigned with any value.</li> <li>Auto-correction for the message content "Type" will automatically take place if ever the encoding of the message content does not match with the "Type" value assigned.</li> </ol>	0
4	To	Numeric	Recipient's mobile number <ul style="list-style-type: none"> <li>The recipient's mobile number must have the country code (without the "+" sign).</li> </ul>	60121234567
5	From	Character	Sender's name, Sender's ID or Sender's mobile number. <b>Format: alphanumeric &amp;/ numeric character</b> <ul style="list-style-type: none"> <li>Numeric CLI (Caller Line Identification): Up to 14 characters. The '+' to be excluded.</li> <li>Alphanumeric CLI (Caller Line Identification): Up to 11 characters.</li> </ul>	Abcenterprise Or Shania Or 60123388990 *Format is Telco dependent



6	Text	Character	<p>Message Content</p> <p><b>If “Type” parameter is assigned</b></p> <ul style="list-style-type: none"> <li>• ASCII: The content must be URL encoded.</li> <li>• Unicode: The content must be formatted in HEX format.</li> </ul> <p><b>If “Type” parameter is not assigned</b></p> <p>Content must be URL encoded, be it ASCII or Unicode.</p> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1. <i>Message content will be converted into Unicode content if ever any Unicode character (<b>except punctuation marks</b>) is detected.</i></li> <li>2. <i>Punctuation marks in Unicode format will be converted to punctuation marks in ASCII format once detected in the message content identified as ASCII message.</i></li> </ol>	<p><b><u>URL encoding</u></b></p> <p><b><i>Roman</i></b></p> <p>Welcome%20to%20abcenterprise</p> <p><b><i>Unicode</i></b></p> <p>%e5%8d%8e%e8%af%ad%e6%b5%8b%e8%af%95</p> <p><b><u>HEX</u></b></p> <p>4e00</p>
7	ServID	Character	Service ID	MES01
8	*Title <i>Optional parameter</i>	Character	<p>Broadcast Title</p> <ul style="list-style-type: none"> <li>• Alphanumeric only, max 50 characters</li> </ul>	Sports555

## Response

Successful response
{MSISDN},{MsgID},{Status}

## 4.2 MO

### 4.2.1 Receiving MO Messages via Long Code

To do this....	Use this endpoint	Method	Expected response from Client
Receive MO messages from MACROKIOSK.	<a href="http://www.yourdomain.com/receive.asp?">http://www.yourdomain.com/receive.asp?</a>	GET/ POST	-1

The following are the parameters that will be included to the endpoint above:

Parameter	Type	Description	Example
msisdn	Numeric	Recipient's mobile number	60121234567
Text	Character	Message content. <i>The content and the service keyword will be URL encoded.</i> <i>Service keywords are at least 1 character long and special characters (*, -, +, space etc.) are not permitted.</i>	ON%20ABC
Time	Date/time	Timestamp of the MO received <b>Format: yyyy-mm-ddhh:mm:ss</b>	2014-12-3123:59:01
Msgid	Numeric	Message ID. <i>Each MO received will be tagged with a unique Message ID.</i>	1234567
Longcode	Numeric	Macro Kiosk's Longcode (msisdn) of which the MO was received.	60138883338

#### Example:

<http://www.yourdomain.com/receive.asp?msisdn=60121234567&text=ON%20ABC&time=yyyy-mm-ddhh:mm:ss&msgid=123456&longcode=60138883338>

## 4.2.2 Receiving MO Messages via Zero Charged Bulk Shortcode

To do this....	Use this endpoint	Method	Successful response
Receive MO messages from MACROKIOSK	<a href="http://www.yourdomain.com/receive.asp?">http://www.yourdomain.com/receive.asp?</a>	GET/ POST	-1

The following are the parameters that will be included to the endpoint above:

Field name	Type	Description	Example
From	Numeric	Recipient's mobile number	60121234567
Text	Character	<p>Message content.</p> <p><i>The content and the service keyword will be URL encoded.</i></p> <p><i>Service keywords are at least 1 character long and special characters (*, -, +, space etc.) are not permitted.</i></p>	ON%20ABC
Time	Date/time	<p>Timestamp of the MO received</p> <p><b>Format: yyyy-mm-ddhh:mm:ss</b></p>	2014-12-3123:59:01
Msgid	Numeric	<p>Message ID</p> <p><i>Every MO received will be tagged with a unique message identifier.</i></p>	1234567
Shortcode	Numeric	Shortcode of which the MO was received.	66300

Telcoid	Numeric	<p>To indicate mobile operator</p> <p><b>Malaysia (where “From” field consists of prefix 60):-</b></p> <p>1 – Maxis</p> <p>3 – Digi</p> <p>2/4 – Celcom</p> <p>5 – U Mobile</p> <p><b>Singapore (where “From” field consists of prefix 65):-</b></p> <p>1 – SingTel Mobile</p> <p>2 – MobileOne</p> <p>3 – StarHub</p>	1
---------	---------	--	---

#### Example

<http://www.yourdomain.com/receive.asp?from=60121234567&text=ON%20ABC&time=yyyy-MM-ddhh:mm:ss&msgid=1234567&shortcode=66300&telcoid=1>

#### Note:

- The zero charged premium shortcode MO, is still available for Singapore.
- For Celcom 2 way messages, please refer to [Known Issues](#).

#### 4.2.3 Client's Response upon receiving MO Messages

1. Upon receiving a request, clients must acknowledge the MO by indicating '-1' in plain text without HTML tags.
2. If the client's application does not respond to the MO as above, Bulk SMS gateway will assume that the message failed to be delivered to the client's application, resulting in a WEBF (Web Failed) status.
3. For Celcom 2-way messages, please refer to [Known Issues](#).

### 4.3 DN (Delivery Notification)

Status	Remarks in BOLD.Pass	Description
DELIVERED	N/A	Message successfully delivered to the mobile handset.
UNDELIVERED	N/A	Message failed to be delivered to the mobile handset.
ACCEPTED	N/A	Message has been delivered to SMSC (Short Messaging Service Centre).
PROCESSING	N/A	Message is yet to be delivered to SMSC, and still on queue at MACROKIOSK gateway.

For real-time DN reports, please login to <https://boldpass.com> with your assigned login ID and password. For API, real time DN is only available upon request to the Global Business Consultants. Once you have requested for real time DN, your DN URL endpoint as shown below will receive the following parameters:  
<http://www.yourdomainDNurl/receive.asp>

Parameters	Description
msgID	The message identification that is returned to the application when a MT (Mobile Terminating) is sent.
msisdn	The MT recipient's mobile number.
status	The real-time DN status from Telco.
StatusDetail	The description of the status, only applicable for UNDELIVERED (if available) *client's account needs to configure in order to receive this optional info
*Any	Optional parameter(s) and value(s) submitted by client upon sending MT request will be returned along with DN.

**Example:**

<http://www.yourdomainDNurl/receive.asp?msgID=123296707&msisdn=85212345678&status=DELIVERED>

OR

<http://www.yourdomainDNurl/receive.asp?msgID=123296707&msisdn=85212345678&status=UNDELIVERED&statusDetail=Handset+not+reachable>

**Note:**

- i) Total number of DNs returned will be based on the number of SMS broadcasted. e.g.: if a group of broadcasts consists of 10 MSISDNs, there will be 10 DNs returned. **If there are more than 1 DN returned for the same SMS (might happen for concatenated SMS), always consider the last DN received as the final DN.**

## 5.0 API Response Code

A response code will be returned for all HTTP / HTTPS GET or POST submissions to Bulk SMS API.

Below is a list of response codes by account type and their corresponding descriptions:

Response Code			Remarks in BOLD.	Description
	Prepaid	Postpaid		
200	Immediate response	Immediate response	Successful	Successful
400	Immediate response	Immediate response	Invalid Parameter	Missing parameter or invalid field type
401	Immediate response	Immediate response	Invalid Account	Invalid username, password or ServID
402	Immediate response	Not applicable	Invalid Account	Insufficient credit
403	Immediate response	Refer to Rejected Log in BOLD.	Invalid Account	Invalid Client IP address (*only applicable for client that have IP checking)
404	Immediate response	Immediate response	Invalid Account	Invalid SenderID length
405	Immediate response	Immediate response	Invalid Parameter	Invalid Msg. Type (only applicable for message type 0, 5 & 6 for all countries. Malaysia's 6 series short code does not support Message type 6).
406	Immediate response	Immediate response	Invalid Parameter	Invalid MSISDN length
407	Immediate response	Refer to Rejected Log in BOLD.	Invalid Content Length	Message length allowed is exceeded ASCII: 1071 characters Unicode: 1000 characters
408	Immediate response	Refer to Rejected Log in BOLD.	Invalid Parameter	Unauthorised sender
409	Immediate response	Immediate response	System Error	System Error. Please contact Tech Support.



411	Immediate response	Refer to Rejected Log in BOLD.	Blacklisted	Blacklisted MSISDN /Subscriber has Opted-Out from receiving bulk promotional messages.
412	Immediate response	Immediate response	Invalid Account	Account suspended / Terminated.
413	Immediate response	Refer to Rejected Log in BOLD.	Invalid Broadcast Time	Broadcast is not allowed during this time.
414	Immediate response	Immediate response	Invalid Account	The account is inactive
415	Immediate response	Refer to Rejected Log in BOLD.	Invalid Account	No active service
416	Immediate response	Refer to Rejected Log in BOLD.	Invalid Account	The account has not been configured for this coverage.
417	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
418	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
419	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
420	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
421	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
422	Immediate response	Not applicable	Invalid Account	Client has no active wallet
423	Immediate response	Not applicable	Invalid Account	The wallet has insufficient balance
424	Immediate response	Refer to Rejected Log in BOLD.	Invalid Account	The reseller has not been configured for this coverage

427	Immediate response	Immediate response	Invalid Broadcast Title	Broadcast title is invalid
429	Immediate response	Refer to Rejected Log in BOLD.	Invalid Additional Parameter	Invalid Additional Parameter length / data type
431	Immediate response	Refer to Rejected Log in BOLD.	Invalid Account	Forbidden access *User subscribed to JWT Authentication method is forbidden to authenticate MT request using clear text credential
432	Immediate response	Refer to Rejected Log in BOLD.	System Error	System Error. Please contact Tech Support.
433	Immediate response	Refer to Rejected Log in BOLD.	Blocked	Daily threshold configured for the number of messages sent via certain country has been breached
434	Immediate response	Refer to Rejected Log in BOLD.	Blocked	The threshold configured for the number of identical messages sent within a pre-defined period has been breached
435	Immediate response	Refer to Rejected Log in BOLD.	Blocked	The threshold configured for the number of messages sent within a pre-defined period has been breached
500	Immediate response	Immediate response	System Error	Internal server error

**Note:**

Response code 412 will be returned in the following circumstances:

**Case 1: Termination of client's account**

(1a) When a Master Account is terminated, all Sub Accounts will also be terminated.

**Case 2: Suspension of client's account**

(2a) Manual Suspension

This refers to Finance related issues such as late payment or payment defaults whereby Finance suspends the Master Account. If this happens, all of its respective Sub Accounts will also be suspended and they will not be able to perform any broadcasts.

(2b) Auto Suspension

This refers to technical related suspensions such as (2bi) 30 days of inactive login and (2bii) when the client failed to reset their password within 90 days.

(2bi) 30 days of Inactive Login

When a Master Account is suspended due to this case, the Sub Accounts under it will NOT be able to make any broadcasts.

(2bii) Failed to Reset Password within 90 days.

When a Master Account is suspended due to this case, the Sub Accounts will still be able to make broadcasts.

**Exceptions:**

- If a reseller's account is suspended due to invalid password attempts, the sub accounts will not be affected.
- When a sub account is terminated, all credits will be reverted back to the reseller's account.

**Definitions:**

Master Account	Refers to the account which is used by ONE authorized person only. There are no sub accounts attached to this person's account. <i>e.g. Minah has signed up for ONE account with Macro Kiosk. This account is solely for the purpose of using Bulk SMS for her own company.</i>
Reseller Account	Refers to one main account with many sub accounts tied up under this main account. <i>e.g. Anthony from Asix Sdn. Bhd. signed up for a reseller account with Macro Kiosk. He is able to sign up a few other companies under Asix Sdn. Bhd. to access the Bulk SMS.</i>

## **6.0 Known Issues & System Limitation**

### **6.1 System Limitation**

- (i) The Euro '€' symbol in the Message is converted to 'E' automatically. The conversion takes place because some Telcos do not support this conversion whereas some Telcos support them. Therefore MACROKIOSK standardizes everything to 'E'.
- (ii) MO reporting is not available in BOLD. for both long codes and short codes (except two-way messaging/ Message Box Module). Client's application must store all the MO records received from the long codes & short codes.

### **6.2 Known Issue**

- (i) Please refer to the Bulk SMS Product Paper.

## 7.0 FAQ

### 1. How do clients integrate to Bulk SMS API?

Use HTTP / HTTPS protocol (either POST or GET) to connect to the bulk SMS API. The etracker bulk SMS API complies with the international standard used by the World Wide Web for the communicating and exchanging of files.

### 1. A content was sent but it was not delivered to the mobile handset. Why?

Please ensure the following:

- You have sufficient SMS credit in your account.
- You have keyed in the correct username and password.
- The text messages are URL encoded.
- The UCS2 content is encoded to the correct hex values if type value 5 is assigned.
- The content has not exceeded the allowable message limits.
- The field type value corresponds to the type of message that you wish to send

#### Note:

- An SMS supports up to 140 bytes per SMS
- The length of a normal text message (7bit) is 160 characters per SMS
- Unicode message should not exceed 70 characters per SMS

### 2. Why are messages delayed or missing?

Such incidences only happen when there is a very huge volume of messages being sent out at any one particular time. This delay usually caused by the message queue over at the mobile operator's SMSC (Short Messaging Service Centre).

As for the missing messages, it is more often than **not caused** by the following scenarios:

- Mobile subscriber has insufficient credits (especially prepaid mobile subscribers)
- The particular mobile number is invalid or ceased
- The particular mobile number has been barred or terminated.

### 3. Why was my MT rejected with error code 'xxxx'?

This is due to invalid Sender ID. Either:

- i) You did not type in the Sender ID correctly OR
- ii) You did not register this Sender ID with AIS CDG L+ yet.

Please ensure you have registered the Sender ID and keyed in the correct one.

**4. Does MACROKIOSK provide client support?**

**MACROKIOSK** provides a 24x7 client support assistance. The number to call is +603 2163 2100. Alternatively, client can email us at [techsupport@macrokiosk.com](mailto:techsupport@macrokiosk.com).

## 8.0 Appendix

### 8.1 API Features

Feature	Description
Supports HTTP/HTTPS request submissions	<ul style="list-style-type: none"> <li>Bulk SMS API supports HTTP and HTTPS requests over the internet.</li> </ul>
REST / SOAP	<ul style="list-style-type: none"> <li>Supports REST and SOAP web service access protocols.</li> </ul>
Supports one-way and two-way SMS service flows	<ul style="list-style-type: none"> <li>One way SMS Service Flow MT Broadcast via Bulk SMS Gateway</li> <li>Two Way SMS Service Flow Receives MO via               <ul style="list-style-type: none"> <li>i) Long Code</li> <li>ii) Short Code</li> </ul> </li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>✓ Supports 2 way Bulk SMS using 6 series shortcode for Malaysia. This is only applicable for Maxis, Celcom, Digi and U Mobile subscribers. (Please refer to <a href="#">Known Issues</a>).</li> <li>✓ Clients are required to get approval from Celcom prior to using 6 series shortcodes. (Please refer to <a href="#">Known Issues</a>).</li> </ul>
Supports Sender ID on MT broadcast	<ul style="list-style-type: none"> <li>Mobile subscriber will be able to see the Sender ID on MT broadcast. (Telco dependent).</li> </ul>
Supports MT format	<ul style="list-style-type: none"> <li>Roman characters (ASCII)</li> <li>Unicode (UCS2) messages</li> </ul>
Supports concatenated SMS for long messages	<ul style="list-style-type: none"> <li>Concatenation is Telco and handset dependent. Please refer to <a href="#">Known Issues</a>.</li> </ul>
Supports Delivery Notification	<ul style="list-style-type: none"> <li>Bulk SMS API supports <a href="#">delivery notifications</a> to clients on the status of each transaction.</li> </ul>

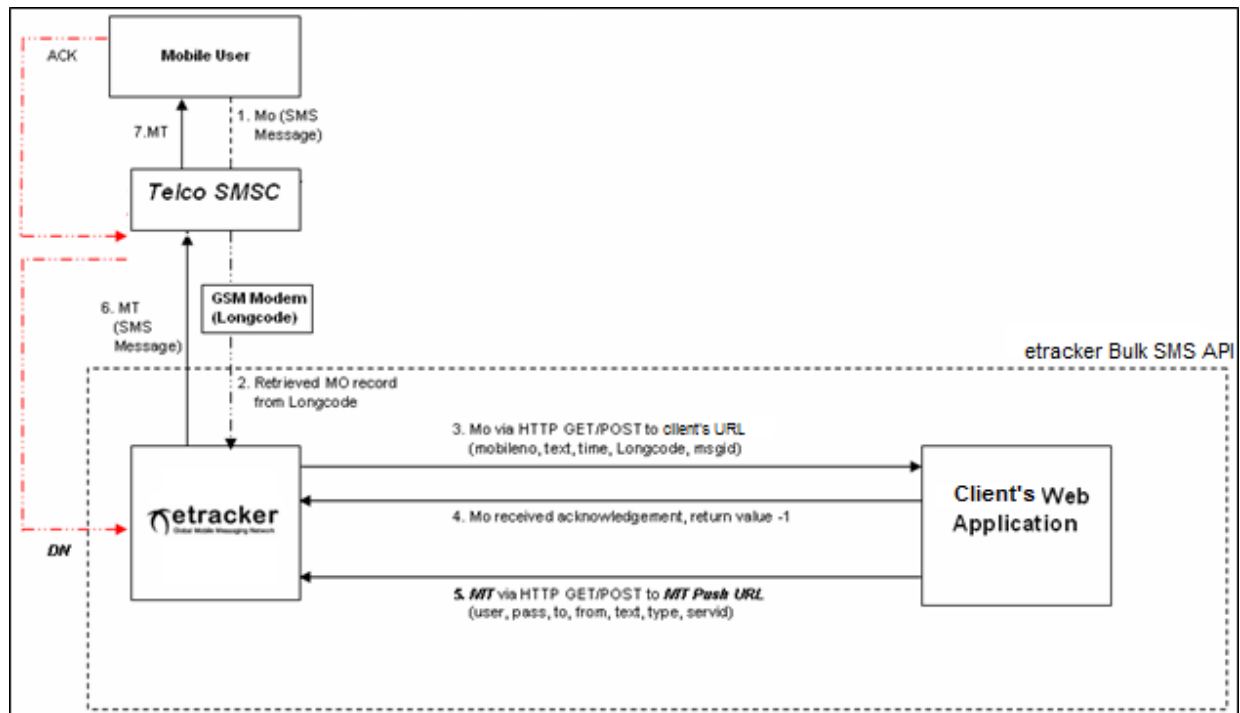


Feature	Description
	<ul style="list-style-type: none"><li>▪ Clients can enable 'real time DN' option for Bulk SMS API. This feature is applicable for all countries.</li></ul>

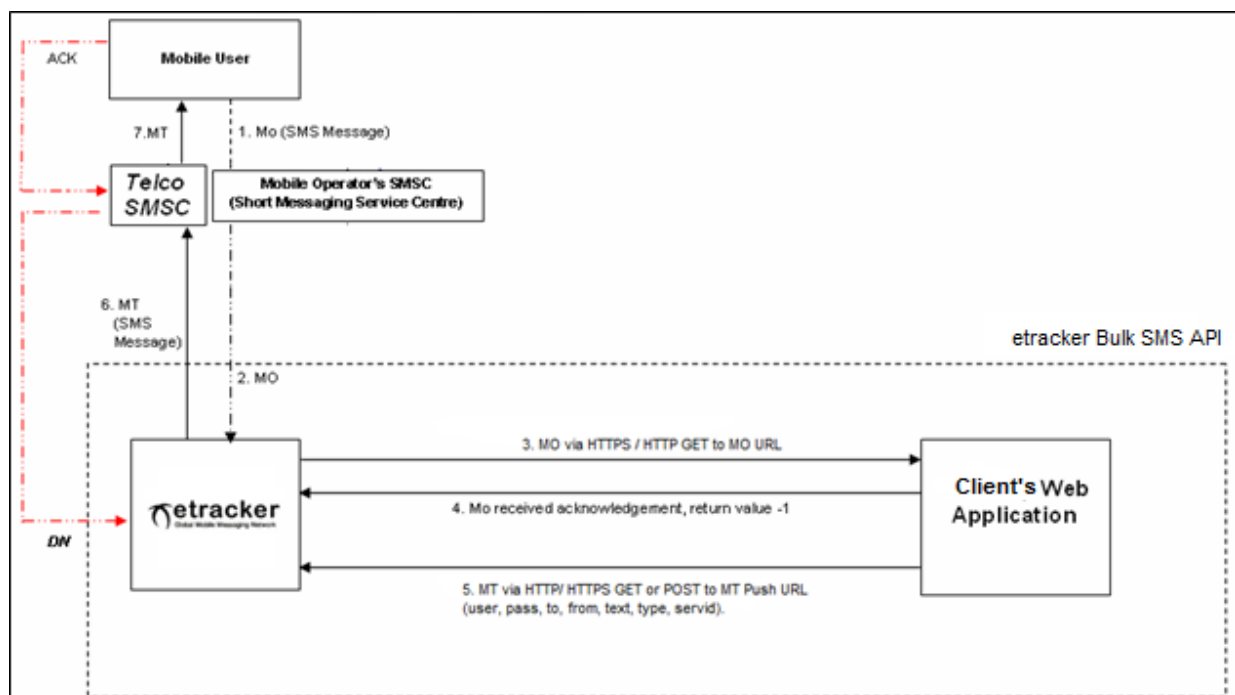
**Note:** The average MT throughput is 30 TPS having considered multiple operators' bandwidth.

## 8.2 API Process Flow

### 2 way Bulk SMS API via Long code



### 2 way Bulk SMS API via Short code



**Description for Bulk SMS API 2-Way Process Flow via Long code and Short code.**

- Mobile users send MO messages to a Long code /Short code. Please note that the long code number varies from country to country.
- Upon receiving the MO message, the GSM Modem/SMSC will forward the MO Message to MACROKIOSK's Bulk SMS gateway for further processing.
- MACROKIOSK's Bulk SMS gateway will pass the MO message via HTTP / HTTPS POST or GET to the respective client's application. Please refer to [Receiving MO Message](#) for further details.
- Upon receiving the MO request, the client's application MUST acknowledge the MO by responding with '-1'.
- Thereafter, the client's application should reply with a MT message by calling MACROKIOSK's Bulk SMS gateway via HTTP/ HTTPS POST or GET. Please refer to section [4.3](#), [4.4](#) & [4.5](#) for further information.
- MACROKIOSK'S Bulk SMS gateway will send the MT message to the Telco's SMSC.
- Client may retrieve the DNs from MACROKIOSK's Bulk SMS gateway via the reporting logs. Please refer to [Delivery Notification](#).

**Note:** Please refer to the *BOLD. Product Paper* for the list of countries that supports long code and short code via Bulk SMS API gateway.

### 8.3 Sample HTTP WEB API request via GET

The following sample code shows how MT can be sent via Rest HTTP GET in .NET:

```
protected async void btnGetSend_Click(object sender, EventArgs e)
{
    string response = null;

    try
    {
        #region Validation of all the parameters before submitting API request
        #endregion

        //Format the REST GET API URL
        string apiFormat =
            "http://etracker.cc/MES/Send?user={0}&pass={1}&type={2}&to={3}&from={4}&text={5}&servid={6}&title={7}";
        string api = string.Format(apiFormat, txtUser.Text, txtPass.Text, txtType.Text, txtTo.Text,
            txtFrom.Text, txtText.Text, txtServiceID.Text,txtTitle.Text);

        using (HttpClient httpClient = new HttpClient())
        {
            //Assign the value of the Accept ("application/xml" or "application/json") header for an HTTP
            request in order to get the response in the desired format.
            httpClient.DefaultRequestHeaders.Accept.Add(new
                MediaTypeWithQualityHeaderValue("application/json"));

            //Send HTTP GET request to the formatted API URL
            response = await httpClient.GetStringAsync(new Uri(api));
        }
    }
    catch (Exception ex)
    {
        response = ex.Message;
    }
    finally
    {
        MessageBox.Show(response);
    }
}
```

Alternatively, MT can be sent via browser by entering the HTTP GET URL in the following format:

<https://www.etracker.cc/bulksms/send?user={Username}&pass={Password}&type={MessageType}&to={Recipient}&from={Sender}&text={Message}&servid={ServiceID}&title={Title}>

## 8.4 Sample HTTP WEB API request via POST

The following sample code shows how MT can be sent via Rest HTTP POST in .NET. Json.NET has been used in this sample to serialize the MT request data into JSON format.

```
protected async void btnPostSend_Click(object sender, EventArgs e)
{
    string result = null;
    try
    {
        #region Validation of all the parameters before submitting API request
        #endregion

        //Declare anonymous type object
        var obj = new { user = txtUser.Text, pass = txtPass.Text, type = txtType.Text, to = txtTo.Text, from = txtFrom.Text, text = txtText.Text, servid = txtServiceID.Text, title = txtTitle.Text };

        //Serialize the object into JSON string
        string json = JsonConvert.SerializeObject(obj);

        using (HttpClient httpClient = new HttpClient())
        {
            //Store the JSON string as the content to be sent to the web API. Specify the HTTP Content-Type header as application/json.
            StringContent content = new StringContent(json);
            content.Headers.ContentType.MediaType = "application/json";

            //Assign the value of the Accept ("application/xml" or "application/json") header for an HTTP request in order to get the response in the desired format.
            httpClient.DefaultRequestHeaders.Accept.Add(new MediaTypeWithQualityHeaderValue("application/json"));

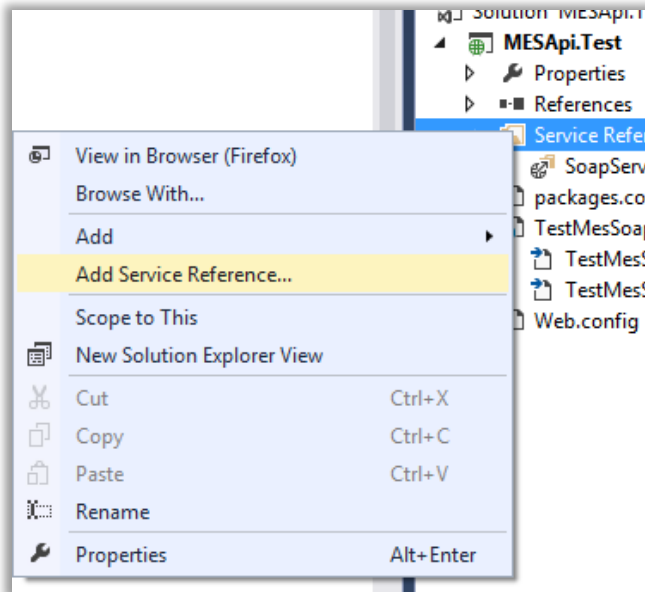
            //Send HTTP GET request to the formatted API URL
            HttpResponseMessage response = await httpClient.PostAsync(new Uri("http://etracker.cc/MES/Send"), content);

            response.EnsureSuccessStatusCode();
            result = response.Content.ReadAsStringAsync().Result;
        }
    }
    catch (Exception ex)
    {
    }
}
```

```
        result = ex.Message;  
    }  
    finally  
    {  
        MessageBox.Show(result);  
    }  
}
```

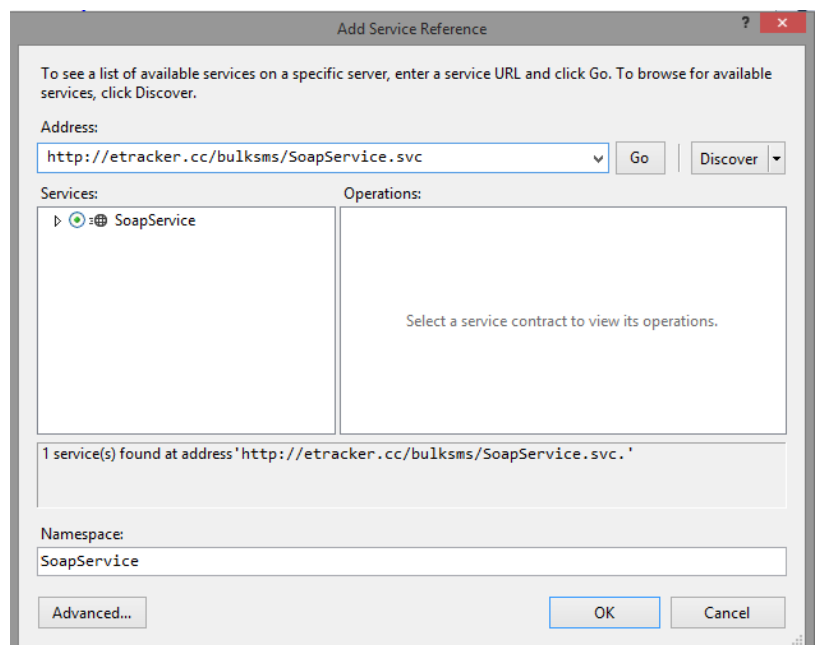
## 8.5 Sample HTTP SOAP API request

MT can be sent via SOAP web service by sending the MT request to the MES SOAP service endpoint. The following code guide illustrates how you can call the MES SOAP web service using Windows Communication Foundation (WCF) in .NET by posting a [SOAP](#) message to the service endpoint.



1. **Right-click** on your **Visual Studio** project in **Solution Explorer** and select **Add Service Reference**.

2. Enter the MES SOAP web service URL in the **Address** text box and provide a **Namespace** i.e. *SoapService*. Then click the **OK** button.





5. Once the service reference has been added, please refer to the following sample code to programmatically send the MT.

```
protected async void btnSend_Click(object sender, EventArgs e)
{
    string response = null;
    SoapServiceClient proxy = new SoapServiceClient();

    try
    {
        SoapParam param = new SoapParam
        {
            Username = txtUser.Text,
            Password = txtPass.Text,
            From = txtFrom.Text,
            Msisdn = txtTo.Text,
            MessageType = txtType.Text,
            Text = txtText.Text,
            ServiceID = txtServiceID.Text,
            Title = txtTitle.Text
        };

        response = await proxy.SendAsync(param);
    }
    catch (Exception ex)
    {
        response = ex.Message;
    }
    finally
    {
        MessageBox.Show(response);
    }
}
```